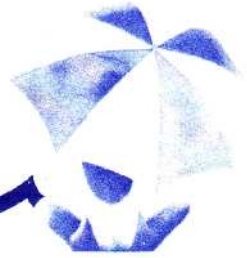


Sundance Maintenance C.C.

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Thank you for entrusting us with the renovation of your swimming pool.

As with most things, regular maintenance will prolong the lifespan of your investment.

IMPORTANT NOTES

Initially

- It is very important that children and pets are kept well clear of the swimming pool during the Marble Plaster or Fibreglass Lining and filling process
- **DO NOT** switch the hose off during the filling process as this will result in a scum line mark that is permanent. Turn the water down to a trickle overnight to ensure constant movement
- Hose the walls and steps down during the filling process particularly during hot weather (Marble Plaster)
- The surface needs to be brushed daily for the 1st month. This helps the curing process (Marble Plaster)
- The pool cleaner and salt (for salt chlorinated pools) may **NOT** be added for the 1st month (Marble Plaster)
- Marble Plaster is not a precise finish and trowel marks can occur

Maintenance

- The baskets need to be emptied, the filter needs to be backwashed and rinsed and the chlorinator cell (not the self cleaning models) needs to be cleaned on a weekly basis. This will vary depending on the wind and pool surround (e.g. leaves, sand ect)
- When adding salt to the pool, either place the salt on the pool steps on black bags or cut the salt bag open and pour the salt into the pool. Using your nylon brush, brush the salt until it dissolves, this will usually take a few minutes. Do not connect the pool cleaner until the salt has dissolved
- Test the water weekly and maintain the following readings
Chlorine: 1.5 – 3.0ppm
pH: 7.4 – 7.6
- Have the water tested on a monthly basis

BRIEF DESCRIPTION OF THE RENOVATION PROCESS

This will vary, depending on the scope of the contract

SUNDANCE MAINTENANCE offers a choice of 2 types of pool finishing, namely Marble Plaster and Fibreglass Lining

The following is guideline to the process that is going to happen on your swimming pool

1. Empty pool

An auger test is carried out in high water table areas to determine the level of the underground water. The system is switched off and the pool emptied. As a precaution, a hole is knocked in the floor of the pool to allow any underground water into the pool. If this is not done, there is a risk that the pressure could “pop” the pool i.e. push it out of the ground

2. Chip off Mosaics, Lift Copings and Repair Cracks

Existing mosaics are chipped off the walls and steps, copings are lifted and cracks are repaired. Depending on the nature of the crack, it is widened and caulked or in severe cases, the crack is repaired with steel pins and epoxy.

3. Install Skimmer Box, Aimflow, Underwater Light and Piping

The old skimmer and aimflow are removed and replaced with the new. They are levelled and caulked in with a waterproofing agent. The same applies to an underwater light. Should new suction and / or return lines be required, they are installed at this time

4. Plaster Mosaic Band, apply new Copings and Mosaics

The levels are set and the new coping is laid on a sand/cement base. A cement band is plastered and the new mosaics are applied to this band. Once the mosaics have set the grouting is done.

5. Paving

The copings set the level of the paving. The ground is compacted and a sand / cement screed is laid. The new paving is laid on the screed and grouted. Depending on the ground conditions, a concrete base is laid and the sand / cement screed is laid on this.

6. Pit and Chip pool, Acid Wash and High Pressure Clean

The pool is chipped with axes. A strong acid solution is brushed on and cleaned off with a high pressure cleaner. This is to remove any algae and / or greasiness before the Marble Plaster process

7. Marble Plaster

Cemcrete Pool Crete Plaster

A Flex Bond coating is applied to the pool surface to provide a separation layer between the old and new plaster. It also serves as a key for the plaster and the pool is usually plastered the day after the Flex Bond application

Standard Site Mix

A stipple bond coating is applied to the pool surface. This consists of a bonding agent and cement mix that provides a key for the new plaster. Once on, it is usually left to cure for 3 – 4 days before the application of the marble plaster

In both cases, the material is mixed with water in the pool and applied by trowel. The mosaics on the steps are applied at this stage. It is critical that nothing gets into the pool at this stage e.g. dogs. The pool is left overnight and next day, the plasterer checks the pool for overnight expansion / contraction cracks. He will attend to any rough spots and start filling the pool. ***The pool cleaner and salt for the chlorinator may not be added for at least 4 weeks after refilling.*** The pool needs to be brushed daily for the 1st month. This will help the curing process.

– See Start Up Guide

8. Fibreglass Lining

Existing in ground gunite pool

A groove is cut under the copings. The pool is then primed with an Isophthalic polyester resin prime / seal coat and 1 layer of 450 gram chopped strand matting (tucking into groove) is applied. 1 layer of surfacing tissue follows. The surface is then sanded down and a layer of NPG / ISO pool coat ratio 450g / m² is applied (the most widely used colours used are White or Pool Blue). A tissue mosaic band is applied to top edge of the pool and where possible, a row is applied to the edge of the steps. A Non – slip surface applied to all step / bay areas.

It is possible to epoxy bond Ceramic Mosaics to the perimeter of the pool instead of tissue mosaics

Suspended Pools

The same procedure as the above is carried out, however, 2 layers of 300 gram chopped strand matting is used instead of 1 layer of 450 gram chopper strand matting.

Existing Fibreglass Pool Shells

The pool is strutted for support and the surface is sanded down before the application of the fibreglass (same process as above)

Non Standard Colours

Numerous colours are available, however, Any colour other than standard Pool Blue and White is not guaranteed to be colourfast and the client will not have any recourse to Sundance Maintenance regarding the colours not being colourfast.

Colours other than White or Pool Blue also have a longer curing period before filling can take place.

9. Clean up and Start Up

Rubble from the renovation is removed from the site. Once the pool is filled, the filtration system is started up. A water sample is taken and a **Computerised Water Analyses** is carried out. You are then quoted on the supply of balancing chemicals.

POOL START UP GUIDE

An important step-by-step guide to the chemical treatment of newly plastered pool.

Day minus 1

Before the pool is plastered, a sample of the tap water should be taken to a pool shop who will test for:

- pH (not to be below 7.2)
- The presence of iron or copper in the solution. If metals are present, add metal remover at step 4. It is advisable to add a metal remover even if no metals are found to be present.
- Calcium hardness. The ideal is 300 to 400 ppm. Below this, calcium chloride should be added at step 5.

The pool shop will recommend the appropriate products to remedy the quality of the water.

Day 1

Plaster Pool

Day 2

- Commence filling the pool from the deep end. We recommend the use of a deflector on the end of the hosepipe to prevent damage to the surface. Fill the pool in one go to avoid a water-ring from forming. Damp down exposed Pool Plaster every hour to prevent premature drying. Protect the plaster from staining (particularly from mud splashes) until the pool is filled.
- Add metal remover while filling.
- Once the pool is filled, add the required calcium chloride in flake form (dissolved in a bucket of water) and check again for metals and calcium hardness.
- Start filter. Do not introduce an automatic cleaner to the pool for 3 weeks. During this period use the pool brush only to remove dust and debris. Brush the Pool Plaster surface with a soft pool brush and backwash at least once a day.
- Leave the pH above 7.8. This will aid the curing and hardening process of the Pool Plaster. Do not use any acid for the first 3 weeks.
- Dose only with small quantities of unstablized granular dry chlorine, or unstablized liquid chlorine during this period.

Day 22

- After 3 weeks check the pH and add only a quarter cup of hydrochloric acid (per 70,000 litre pool) dissolved in a plastic bucket of the pool water in any single 6 hour period with

the filter running. Periodically dose until pH reads between 7.4 and 7.6. It could take over a week before the pH is corrected. Never use sulphuric acid in the pool.

- Follow the chlorine manufacturer's instructions for dosing from now on.
- Stabilize the water if desired. Dissolve the stabilizer granules in boiling water before adding to the pool.
- If a salt water chlorinator is installed, add salt to the water and switch on the chlorinator. Refer to the manufacturer's instructions.
- The automatic pool cleaner can now be connected.

Important information

- When filling, **DO NOT** switch the water off until the pool is full. If the water is switched off, a water mark will occur which is permanent
- Always follow the chemical manufacturers' instructions when adding chemicals to the pool. Chemicals should be added in a controlled way as it is not advisable to overdose with any chemical hoping that the effect will last two weeks rather than one. Overdosing can damage the Pool Plaster surface.
- Overdosing with acid causes etching of the Pool Plaster surface and destroys total alkalinity. Always dilute acid before dosing, and add while the pump is running to ensure an even distribution.
- Overdosing with calcium hypochlorite (dry granular chlorine) causes scale build-up and high pH.
- Overdosing stabilised chlorine causes a drop in pH and etching of the Pool Plaster surface as it neutralizes itself by leeching the calcium from the Pool Plaster. Keep chlorine pills or granules well away from the immediate edge of the pool or surface of the Pool Plaster. Also keep out of direct jet of airflow and away from or near the weir.
- The use of a gas chlorinator is not recommended. Due to the chemical reactions that take place where the gas is introduced to the water, HCl (Hydrochloric Acid) is formed which causes etching of the Pool Plaster surface and results in serious staining.

IMPORTANT NOTICE

**ONCE FILLING BEGINS THE WATER
MUST NOT
BE TURNED OFF UNTIL THE POOL IS FULL.**

**TURNING THE WATER OFF BEFORE FILLING IS
COMPLETE WILL RESULT IN A PERMANENT
WATER MARK**

REGULAR POOL MAINTANANCE

Benefits of correctly balanced water

- Better looking water
- Better feeling water
- Chemicals work more effectively
- Protects the pool surface and equipment

Unbalanced water leads to the following

- Scale formation
- Corrosion of the surface and equipment
- Staining
- Premature ageing

Aspects of water management

1. pH (Potential Hydrogen) – ideal level is 7.4 – 7.6

This indicates whether the water is either too acidic, too alkaline or in a state of balance

pH can change due to: Fill water, Rain, Bather Load, Chemicals, Dust and Algae

Low pH (Below 7.2 is regarded as low and will require adjustment)

Problem

- Faster chlorine loss
- Chloramines
- Skin and eye irritation
- Rough, etched plaster
- Metal equipment corrodes
- Vinyl liners wrinkle

Solution (To correct it)

Africhem pH Increase
BioGuard Balance Pak 200

High pH (Above 7.6 is regarded as high and will require adjustment)

Problem

- Eye and Skin irritation
- Poor chlorine efficiency
- Cloudy water
- Algae growth
- Scale formation

Solution (To correct it)

Africhem Dry Acid
BioGuard Lo n Slo
Hydrochloric Acid

- Reduces circulation
 - Reduces heater efficiency
- Drain and refill with water that has a lower calcium content

4. CHLORINATION

Ideal Chlorine Level: 1 – 3 ppm (FAC – Free Available Chlorine)

Chlorine attached to swimmer wastes (hairspray, perspiration etc) is called Chloramines or combined Chlorine and is ineffective as a sanitizer

Presence of Chloramines is indicated by:

- Strong chlorine smell
- Burning eyes
- Cloudy / dull water

To overcome Chloramines, the pool needs to be Oxidised (Shock Treated) regularly

KEY POINT – IF YOU CAN SMELL THE CHLORINE, YOU HAVE CHLORAMINES

5. SALT CHLORINATION

The process:

A salt chlorinator comprises of a power pack (power supply) and electrode (Cell). Salt is added to the pool water to create a saline solution. This solution then passes through the electrode and through a process of electrolyses, chlorine is produced

Due to the nature of Salt Chlorination, the pH of pool water will rise, thereby requiring regular additions of acid to lower the pH

Salt calculation

| | | |
|------------------|-------|--------------------------------------|
| Sea Salt | Units | 7 Kg salt per 10 000 litres of water |
| Clearwater | Units | 4 Kg salt per 10 000 litres of water |
| Most Chloromatic | Units | 5 Kg salt per 10 000 litres of water |

The electrode should be cleaned at least once a week. This can be done in the following ways:

- Remove and hose off
- Use an ice cream stick to remove any excessive build up – **NEVER** use a knife or wire brush as this will damage the cell (remember – the cost of the cell is approximately 1 third of the price of the chlorinator)
- Africhem Salt Cell Saver or BioGuard Salt Cell Cleaner is recommended to remove calcium build up from electrodes

Ways of making it easier to clean the cell

- Regular use of Africhem Scale Stop or BioGuard Scale Inhibitor will help to prevent the build up on the cell
- BioGuard Optimizer will soften the water and make the minerals in the water more soluble thereby making it easier to clean the cell
- Chlorinators with self-cleaning electrodes are also available. Please contact us for more information

TO SUM UP – THE IDEAL CHEMICAL LEVELS

| | |
|------------------|----------------------------|
| Chlorine | 1.0 – 3.0 ppm |
| pH | 7.4 – 7.6 |
| Total Alkalinity | 80 – 120 ppm |
| | 125 – 150 ppm (Fibreglass) |
| Calcium Hardness | 175 – 225 ppm |
| | 225 – 275 ppm (Fibreglass) |
| Salt | 4000 ppm (Clearwater) |
| | 5000 ppm (Chloromatic) |
| | 7000 ppm (Sea Salt) |

HOLIDAY POOL CARE

Here are steps that you can follow to prepare your pool for the holidays, so that on your return, you'll find your pool ready to enjoy

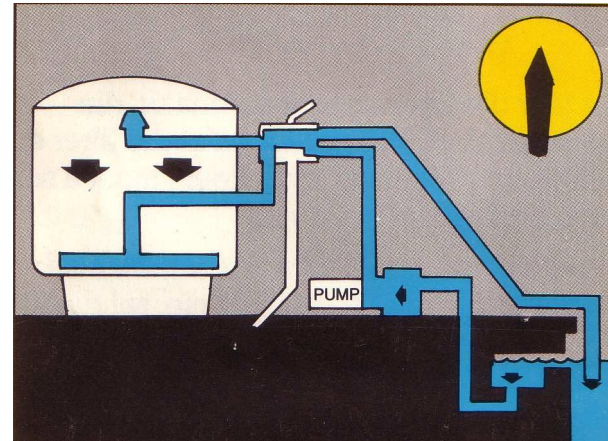
1. Have a comprehensive water analyses done before you leave. Some of the water balance parameters e.g. Total Alkalinity, pH, Calcium Hardness may require corrective action before your departure. Left unchecked damage to your pool may result and can influence the efficiency of the chemicals
2. The day before your departure, brush the walls of your pool and vacuum it thoroughly. Remove all leaves and debris from the weir and pump baskets
3. Backwash the filter for at least 5 minutes and top the pool to the highest level. Set the time clock to run your pump and filter for approximately 12 hours per day
4. Test and adjust pH - the correct range is 7.4 – 7.6. This is an extremely important test for your pool
5. Add **Africhem Pool Shock** or **BioGuard Lite** shock treatment by following the dosage directions on the product label
6. The following morning, re – check the pH and free chlorine levels. The free chlorine should be a minimum of 3ppm.
7. Add a **Africhem 1.5Kg Floater** or **BioGuard Swimclear Floater** to the pool
8. For added protection from algae, apply a dose of **Africhem Blue Algaecide** or **BioGuard Back Up** Algae Inhibitor

Now that you have your holiday pool care program in place you can relax and enjoy your well earned rest!

FILTER POSITIONS – WHAT THEY MEAN

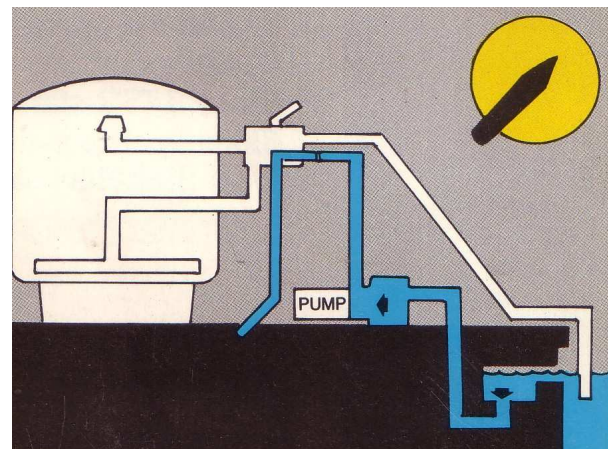
Filter

For normal filtration and vacuuming. Dirty water enters through the top distributor and dirt is deposited throughout the sand bed. Clean water returns to the pool through the underdrain



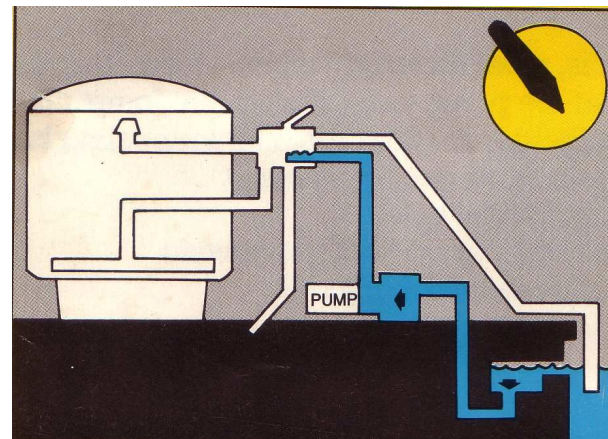
Waste

For lowering the level or emptying the pool



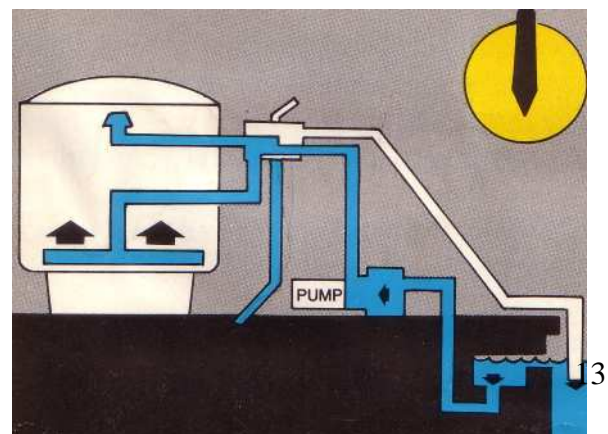
Closed

Shuts off water flow to the filter enabling maintenance on the filter



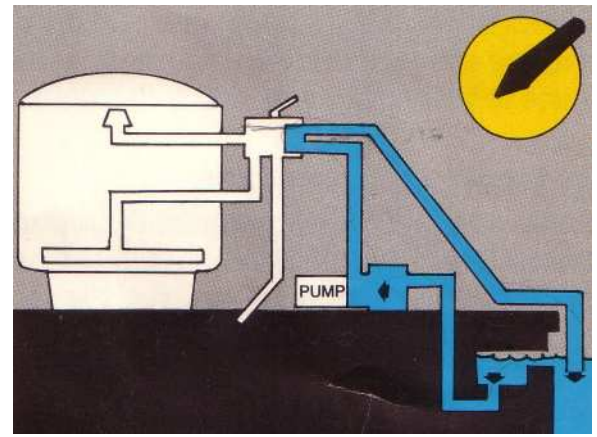
Backwash

Reverses the water flow through the filter. Dirty water enters through the top underdrain, lifts and washes the sand bed. Dirty water is discharged through the top distributor to Waste



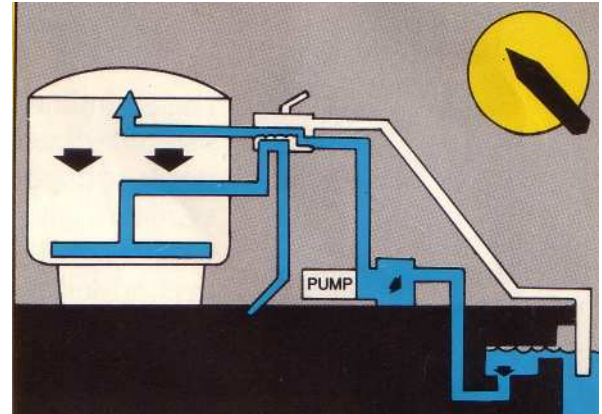
Bypass / Recirculate

For by passing the circulating the water



Rinse

Changes the flow back to the filter direction and cleans final dust collection from pipes and sand bed to waste. It also resettles the sand bed



Did you know that we also offer the following?

1. Weekly or Fortnightly Pool Valet Service
2. Installation of pumps, filters, chlorinators, Solar Heating and Heat Pumps
3. Computerized water analysis and correction
4. A wide range of spares and accessories

Sundance Maintenance Contact Details

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